

## **5-Day Course Outline**

### **Pre-Course Reading; Self Teaching Manual, 12<sup>th</sup> Edition**

#### **Monday: Time Value of Money, Discount Rates and Decision Criteria (Chapters 1-3)**

You will learn to apply the concepts of time value of money in calculating rate of return (internal rate of return), net present value, ratios and other criteria. Other topics include understanding calculator and spreadsheet functions, graphical approaches illustrating the meaning of rate of return and net present value as well as methods used to determine an appropriate discount rate. Evaluating service producing alternatives will be presented including cost analysis and incremental calculations.

#### **Tuesday: Application of Decision Criteria, Inflation (Chapters 4-5)**

The application of decision criterion to mutually exclusive and non-mutually exclusive alternatives will be reviewed. This discussion will also introduce related problems concerning cash flow streams exhibiting a cost-income-cost pattern and the subsequent dual rates of return and the meaning of economic results. Application of inflation as it relates to escalated (or current) and constant (or real) dollar analyses will be introduced.

#### **Wednesday: Inflation, Risk, Sensitivity Analysis, and After-Tax Cash Flow (Chapters 5-8)**

Continued discussion on inflation will focus on understanding how this important parameter may impact the type of dollars and the appropriate discount rate in escalated and constant dollar calculations. Sensitivity analyses addressing uncertainty are explored along with an introduction to quantifying risk through expected value calculations. Development of after-tax cash flow will focus on related tax deductions including costs that may be expensed, expenditures that are capitalized and deducted by methods such as depreciation, depletion, amortization or write-off's and loss forward considerations.

#### **Thursday: Application of Criteria in an After-Tax Environment (Chapters 8-9)**

The details of calculating after-tax rate of return, net present value and ratios are presented for a variety of investment scenarios. Other topics include the impact of an investor's financial position on economics and the handling of working capital. The conversion of before-tax operating cost savings into after-tax cash flow and the proper handling of sunk costs and opportunity costs will also be explored. Understanding the meaning of after-tax NPV in estimating before-tax market value of properties is also addressed.

#### **Friday: Related Issues in an After-Tax Environment (Chapters 9-11)**

Recognition of the important differences in financial shareholder reporting vs. tax reporting for publicly traded companies. After-tax cost analysis of service applications will focus on different methods of evaluating replacement and leasing vs. purchasing equipment and related issues. Finally, the course is concluded with discussion pertaining to evaluations involving borrowed money.